



KNOWLEDGE REGARDING HEMODIALYSIS AMONG III YEAR B.SC (N) STUDENTS OF SELECTING NURSING COLLEGE AT CUDDALORE DISTRICT

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ABSTRACT

Hemodialysis is used in patients with rapidly developing loss of kidney function, called acute kidney injury (acute renal failure) and it is a complex treatment for chronic kidney disease (CKD) and effects many outcomes. Apart from obvious outcomes, such as mortality, morbidity and health-related quality of life (HRQoL). Hemodialysis is used for patient who are actually ill and require short term dialysis and for patients with advanced CKD and ESRD who require long term (or) permanent renal replacement therapy. In worldwide 30 – 40 % patient are preferred Hemodialysis for is 7852 per million populations 785 million population develop ESRD which require Hemodialysis for their survival every year in India 9000 patients are put on Hemodialysis 1 lac ESRD patient 60% of them drop out and 20% die due to inadequate dialysis and increased psychological demand like anxiety. From a better understanding of the experience of people living on dialysis, health professionals can more adequately support them so they can live as fully as possible. **Objectives:** 1. To assess the existing knowledge III year B.sc (N) students regarding hemodialysis. 2. To associate the knowledge of III year B.sc (N) students regarding hemodialysis with their demographic variables. **Methodology:** descriptive design was used to collect data among 30 samples using Non-probability convenient sampling technique, after obtaining informed consent. structured questionnaire given to assess the knowledge regarding hemodialysis among III year B.sc (N) students. **Conclusion:** The present study assessed the knowledge of subjects on hemodialysis and found that knowledge out of 30 students majority of 26(86%) students having adequate knowledge, 4(14%) of them having moderate knowledge and none of them having inadequate knowledge.

KEYWORDS: hemodialysis, chronic kidney disease, end stage renal disease.

INTRODUCTION:

Happiness is nothing more than good health.

Hemodialysis is defined as the artificially removing waste material such as creatinine and excess water and urea from the blood. This is usually carried out in the case of kidney failure

The first hemodialysis was performed in a uremic patient by Haas in 1924 at the university of Giessen in Germany. He used a tubular device made of collection, cannulation of the radial and carotid arteries. The Portal Vein and Hirudin for Anticoagulant. Later that year he added a blood pump. In 1937, the first flat hemodialysis membrane made of cellophane was produced

Hemodialysis provides a sufficiently safe and effective treatment to purify the blood in the event of partial or complete kidney failure. United States worldwide 30-40% patients referred to nephrologist as ESRD permanent hemodialysis for 7852 per million population develop ESRD. In India 9000 patients are put on hemodialysis out of one lakh population. For patient chronic renal failure hemodialysis is prevent death although it does not cure the metabolic disease.

Hemodialysis is the most common methods of dialysis more than 280000 Americans currently receive chronic hemodialysis is used for patient who are actually ill and require short term dialysis 2 for patient with ESRD who require long term or permanent therapy.

In 1943, Willem Kolff from the Netherlands was one of the first investigator interested in the role of toxic solutes in causing the uremic syndrome. In 1943 Hemodialysis system using cellophane membrane and an immersion bath and the first recovery of an acute renal failure patient treated with hemodialysis was reported.

NEED FOR THE STUDY:

Hemodialysis provides a sufficiently safe and effective treatment to purify the blood in the event of partial or complete kidney failure. In United States worldwide 30-40% patients are referred to nephrologist as ESRD permanent hemodialysis out of one lakh ESRD patient 60% of them drop out and 20% die due to inadequate dialysis.

It was estimated that during 2007 more than million individuals in the United States were affected by the disease while this number is about to double during the following ten years. Hemodialysis is the most common replacement therapy of renal function in patients with chronic kidney disease however it is a demanding therapy of high cost.

Nurses being the largest care providers after services in different Areas nephrology nursing care is one of them but nurses knowledge need to be cope with advanced modern technology on hemodialysis.

The nursing students are the future generation care givers to the patient with various disease in hospital therefore the researcher felt that it is necessary to do the study to nursing students for assessing knowledge of them regarding hemodialysis.

OPERATIONAL DEFINITION:

Assess: It refers to the identifying the level of knowledge regarding hemodialysis.

Knowledge: It refers to understanding information about hemodialysis.

Hemodialysis: A medical procedure to remove fluid and waste products from the blood and to correct electrolyte imbalance. B.Sc Nursing student: A nursing student can be enrolled in a programme that leads to a bachelor of science in nursing

OBJECTIVES:

1. To assess the knowledge of III year B.sc (N) students regarding hemodialysis.
2. To associate the knowledge of III year B.sc (N) students with their demographic variables Regarding hemodialysis.

HYPOTHESIS:

- **H1:** There will be a significant improved knowledge score among III year B.Sc(N) students of O.P.R memorial college of paramedical science at Vadalur.
- **H2:** There will be a significant association knowledge score of III year B.sc (N) students with their demographic variables regarding hemodialysis.

METHODOLOGY:

Descriptive research design was adopted for this study.

Population: The population of the study comprised of student nurses studying in selected college.

Sample: A sample of 30 student nurses studying in III year in selected college was drawn using convenient sampling technique.

Description of tool:

Tool consist of 2 section

Section I: It composed of demographic data of III year B.Sc(N) students such as age, religion, socioeconomic status, type of family.

Section II: It composed of 25 structured questionnaire on hemodialysis among III year B.Sc (N) students

Data collection period: The data will be collected over a period of 2 weeks in selected college at vadalur. Confidentiality will be assured to all the subjects to get their co-operation throughout the process of data collection.

RESULT AND DISCUSSION:

Descriptive design was used to collect data among 30 samples using Non-probability convenient sampling technique, after obtaining informed consent.

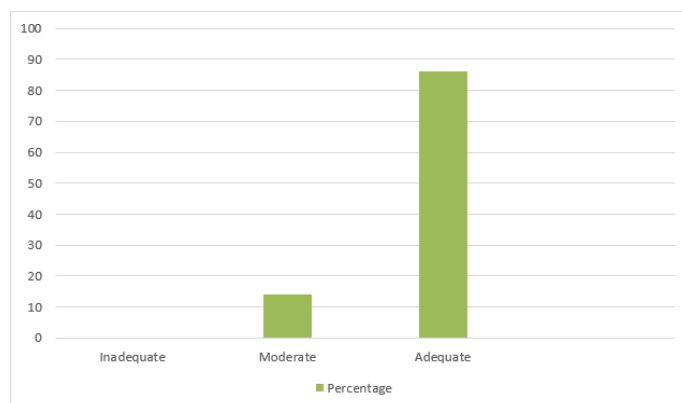


Fig. 1: Frequency and percentage distribution of III year B.sc (N) students according to their level of knowledge

The above figure shows that the assessment of knowledge out of 30 students majority of 26(86%) students having adequate knowledge, 4(14%) of them having moderate knowledge and none of them having inadequate knowledge.

Table 1: Distribution of mean, SD and mean percentage for Overall level of knowledge III year B.sc (N) students

N=30

Knowledge	Maximum score	Mean	SD	Mean %
Structure knowledge questionnaire	25	16.3	2.92	54.33%

The above Table-1 represents the mean, SD and mean % in the aspects of knowledge of students on Nosocomial Infection. The mean score of students is 16.3, SD is 2.92 and the mean percentage is 54.33. This indicates that the value is significant increase in knowledge level of students.

Table 2: Association of knowledge level of III year B.sc (N) students with their demographic variables

N=30

S. No	Demographic variable	Inadequate Knowledge		Moderate knowledge		Adequate knowledge	
		Frequency	%	Frequency	%	Frequency	%
1	Age:						
	a) 18-20 yrs	-	-	3	10%	-	-
	b) Below – 18 yrs	-	-	1	3.33%	25	-
	c) Above-20 yrs	-	-	1	3.33%	-	-
2	Religion:						
	a) Hindu	-	-	5	16.70%	25	83.3%
	b) Muslim	-	-	-	-	-	-
	c) Christian	-	-	-	-	-	-
3	Socioeconomic status:						
	a) Low class	-	-	-	-	-	-
	b) Middle class	-	-	5	16.76%	25	83.3%
	c) High class	-	-	-	-	-	-
4	Type of family:						
	a) Nuclear family	-	-	4	13.3%	16	53.3%
	b) Joint family	-	-	10	33%	-	-
	c) Extended family	-	-	-	-	-	-
5	Family Income:						
	a) 5000-10000	-	-	22	73.3%	-	-
	b) 10000-15000	-	-	-	-	7	23.3%
	c) >15000	-	-	-	-	1	3.3%

The above Table-2 shows the association between the demographic variables and the level of knowledge. The chi square value obtained for Religion, Socioeconomic status and Type of family was also statistically not significant.

CONCLUSION:

The aim of the study was knowledge regarding hemodialysis among III year b.sc(n) students of selecting nursing college at cuddalore district. The Objectives of the study to assess the knowledge of III year B.sc (N) students regarding hemodialysis. To associate the knowledge of III year B.sc (N) students with their

demographic variables. The total of 30 student nurses selected for the study using convenient sampling technique. The conceptual framework adopted for the study is based on Johnson behavior system model. The instrument used for data collection was self-administered structured questionnaire. The present study assessed the knowledge of subjects on hemodialysis and found that knowledge out of 30 students majority of 26(86%) students having adequate knowledge, 4(14%) of them having moderate knowledge and none of them having inadequate knowledge.

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